

# NORTHERN CALIFORNIA GEOLOGICAL SOCIETY



**NCGS DINNER MEETING Wednesday May 25, 2016**  
Orinda Masonic Center, 9 Altarinda Road, Orinda, CA

## **Monterey Canyon: Superhighway to the Deep-Sea**

**Dr. Charlie Paull**

**Senior Scientist at the Monterey Bay Aquarium Research Institute (MBARI)**

**(Reservations are required by May 20, 2015, Limit 100 persons)**  
**We are sorry but we will not be able to accommodate “walk-ins”**

The NCGS is pleased to host this *special dinner meeting* with **Dr. Paull**. This annual event will be catered by *Back Forty Texas BBQ* and consist of *Pork Ribs and BBQ Chicken, Tossed Green Salad, BBQ Beans, and Fresh Corn Cobettes*. A *deluxe veggie burger* is available upon request (see below). *Desert will include assorted cookies and brownies*. *Wine will also be served*.

Dr. Charlie Paull will describe the on-going efforts to understand the geologic processes occurring within Monterey Submarine Canyon, offshore of central California. For perspective, Monterey Canyon is equivalent in size to the Grand Canyon. Submarine canyons in general are conduits in which sediment-laden flows (including the wide range of gravity flows from slumps to turbidity currents) swiftly transport massive amounts of sediment from the shallow ocean to the deep sea. While such flows are among the most important processes by which sediments are carried across the Earth's surface and are credited for forming the canyons, very few direct measurements have ever been made of what actually happens during the sediment flow events. The lack of empirical data on sediment flows is a consequence of the difficulty in accessing canyon floors, the inability to predict when flows will happen, and the reality that energetic flows put monitoring equipment at risk. To understand submarine canyons and to further deep-sea technology development, the Monterey Bay Aquarium Research Institute (MBARI) has taken on the challenge of monitoring sediment flows and making direct measurements within these events. To achieve this goal, state of the art robotic vehicles have been utilized and several novel new instruments have been developed. With these technologies, Charlie's group at MBARI and neighboring institutions, have demonstrated that sediment-laden flows occur on a sub-annual basis in Monterey Canyon and produced startling surprises as to what happens during these energetic submarine events. These efforts have changed the focus of marine geologic research on submarine flows from a forensic science to making real time measurements of the evolving system.

\*\*\*\*\***Dinner Logistics**\*\*\*\*\*

**Social Hour:** 6:00 – 6:45 pm; **Dinner:** 6:45 – 8:00 pm; **Presentation:** 8:00 – 9:00 pm

**Cost: \$25/person**

\*\*\*\*\* ✂ \*\*\*\*\***Registration** \*\*\*\*\*

Name(s): \_\_\_\_\_

E-mail: \_\_\_\_\_

Phone (day): \_\_\_\_\_ Phone (cell) \_\_\_\_\_

Check one per person: Regular Dinner: \_\_\_\_ Vegetarian: \_\_\_\_ # Attending \_\_\_\_\_ Check Amount: \_\_\_\_\_

Please clip and mail this registration form with a check made out to NCGS to:

**Barbara Matz, 803 Orion #2, Hercules CA 94547**

Questions: e-mail [barbara.matz@cbifederalservices.com](mailto:barbara.matz@cbifederalservices.com); Phone: (415) 713-8482